Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A light emitter, comprising:

a substrate having a porous layer; and

a semiconductor emission region formed on said substrate, said emission region capable of emitting light omnidirectionally in response to a bias, said porous layer on one or more surfaces of said substrate not covered by said emission region, said porous layer enhancing extraction of said emission region light passing through said substrate.

Claim 2. (currently amended) The emitter of claim ~~1~~ 3, wherein said emission region comprises an active layer sandwiched between two oppositely doped layers, said active layer emitting light omnidirectionally when a bias is applied across said oppositely doped layers.

Claim 3. (currently amended) A light emitter, comprising:

a substrate having a porous layer; and

a semiconductor emission region formed on said substrate, said emission region capable of emitting light omnidirectionally in response to a bias, said porous layer enhancing extraction of said emission region light passing through said substrate

~~The emitter of claim 1~~, wherein said porous layer is on the surface of said substrate opposite said emission region.

Claim 4. (original) The emitter of claim 3, wherein said

substrate and its emission region are mounted in a flip-chip orientation with said surface of said substrate having said porous layer as the primary emitting surface of said emitter.

Claim 5. (currently amended) The emitter of claim 4, wherein said substrate and its ~~emitting~~ emission region are mounted on metal layers, said bias applied to said emitting region through said metal layers.

Claim 6. (currently amended) The emitter of claim ~~1~~ 3, wherein said substrate and its ~~emitting~~ light emission region are encased in a protective epoxy.

Claim 7. (currently amended) A light emitter, comprising:

a substrate having a porous layer; and

a semiconductor emission region formed on said substrate, said emission region capable of emitting light omnidirectionally in response to a bias, said porous layer enhancing extraction of said emission region light passing through said substrate ~~The emitter of claim 1~~, wherein said emission region is formed on a surface of said substrate, the surface of said substrate opposite said emission region being patterned, said porous layer on said patterned surface of said substrate.

Claim 8. (currently amended) The emitter of claim ~~1~~ 7, wherein ~~said emission region is formed on a surface of said substrate,~~ the surface of said substrate opposite said emission region ~~having~~ has a sawtooth pattern, said porous layer formed on said sawtooth patterned surface of said substrate.

Claim 9. (currently amended) The emitter of claim ~~1~~ 7, wherein ~~said emission region is formed on a surface of said substrate,~~

the surface of said substrate opposite said emission region ~~having~~ has a trench pattern, said porous layer formed on said surface of said trench patterned surface of said substrate.

Claim 10. (currently amended) The emitter of claim ~~1~~ 7, wherein ~~said emission region is formed on a surface of said substrate,~~ the surface of said substrate opposite said emission region ~~having~~ has a post pattern, said porous layer on said post patterned surface of said substrate.

Claim 11. (currently amended) The emitter of claim ~~1~~ 3, wherein said substrate is made of silicon carbide (SiC).

Claim 12. (withdrawn) An apparatus for forming a porous layer on the surface of a semiconductor, comprising:

an electrolyte held in a reservoir, said reservoir arranged to allow said electrolyte to contact one or more surfaces of a layer of semiconductor material;

a heater for heating said electrolyte; and

a power source for applying a bias across said electrolyte and said layer of semiconductor material, said bias causing a current to run between said electrolyte and said layer of semiconductor material forming a porous layer on said one or more surfaces of said semiconductor material in contact with said electrolyte.

Claim 13. (withdrawn) The apparatus of claim 12, wherein said power source comprises a negative and positive terminal, said negative terminal contacting said electrolyte and said positive terminal contacting said layer of semiconductor material.

Claim 14. (withdrawn) The apparatus of claim 12, further

comprising a cathode immersed in said electrolyte, the power source bias applied across said cathode and said semiconductor material.

Claim 15. (withdrawn) The apparatus of claim 12, wherein said reservoir comprises a cup, said semiconductor material arranged adjacent to the bottom of said cup, said cup having one or more holes to allow some of said electrolyte to run out of said cup and contact one or more surfaces of said semiconductor material.

Claim 16. (withdrawn) The apparatus of claim 15, further comprising a sealant between the bottom of said cup and said semiconductor material, around said one or more holes.

Claim 17. (withdrawn) The apparatus of claim 12, wherein said heater comprises an immersion heater.

Claim 18. (withdrawn) The apparatus of claim 12, further comprising a lamp to illuminate said electrolyte with ultra violet (UV) light.

Claim 19. (withdrawn) The apparatus of claim 12, wherein said electrolyte comprises an HF based or buffered HF based electrolyte.

Claim 20. (withdrawn) The apparatus of claim 12, wherein said electrolyte comprises ammonium fluoride (NH_4F) and water.

Claim 21. (withdrawn) The apparatus of claim 12, wherein said electrolyte comprises ethanol (C_2H_5OH) and water.

Claim 22. (withdrawn) A method for forming a porous layer on the

surface of a semiconductor, comprising:

providing an electrolyte;

placing said electrolyte in contact with one or more surfaces of a layer of semiconductor material;

heating said electrolyte;

introducing a bias across said electrolyte and said semiconductor material causing a current to flow between said electrolyte to said semiconductor material, forming a porous layer on said one or more surfaces of said semiconductor in contact with said electrolyte.

Claim 23. (withdrawn) The method of claim 22, further comprising providing ultra violet (UV) illumination to said electrolyte during the introduction of said bias.

Claim 24. (withdrawn) The method of claim 22, further comprising removing said bias from across said electrolyte and said semiconductor after formation of said porous layer and removing said electrolyte from contact with said semiconductor.

Claim 25. (original) A light emitting diode (LED) package, comprising:

an LED comprising;

a substrate with a porous layer on one surface;

an emission region formed on said substrate on a surface opposite said porous layer;

one or more metal layers, said LED flip-chip mounted to said metal layers with said substrate being the primary emission surface of said LED; and

two contacts for applying a bias across said emission region causing said emission region to emit light omnidirectionally, said porous layer enhancing light extraction of emission region

light passing through said substrate.

Claim 26. (original) The LED package of claim 25, wherein said emission region comprises an active layer sandwiched between two oppositely doped layers, said bias applied across said oppositely doped layers causing said active layer to emit light omnidirectionally.

Claim 27. (original) The LED package of claim 25, wherein said LED is encased in a protective epoxy.

Claim 28. (canceled) A light emitter, comprising:

a semiconductor emitter having a plurality of layers, said emitter capable of emitting light omnidirectionally in response to a bias;

one or more porous layers on one or more of said plurality of layers, said porous layers enhancing extraction of said emitter light from said semiconductor emitter.